## Chapter **5**

## Factors, Multiples, and Patterns

Dear Family,

In this chapter, your student is learning about factors, multiples, prime and composite numbers, and patterns. The vocabulary terms for this chapter are: factor pair, divisible, multiple, prime number, composite number, and rule.

Your student can practice identifying factors, multiples, and patterns using coins!

- Show your student a dime and ask, "How much is this coin worth? What are the factors of 10? What are some multiples of 10?" Repeat the questions with other coins and combinations of coins. Ask your student to explain how he or she found the factors of each number.
- Display a set of coins and ask your student to determine their value. Then ask your student if the value is divisible by several numbers. For example, if the value is 27 cents, ask, "Is 27 divisible by 2? Why not? Is 27 divisible by 3? How do you know?" Continue asking if the value is divisible by 5, 6, 9, and 10.
- Display a set of coins and ask your student to determine their value. Then ask
  your student whether a given number is a factor or multiple of the value. For
  example, display coins with a value of 15 cents. Ask, "Is 15 a multiple or factor of
  5? Is 15 a multiple or factor of 45?" You can also review prime and composite
  numbers. Ask, "Is 15 a prime number or a composite number? How do you know?"
- Have your student use coins to create a pattern. Then ask, "What would be the 20th coin? What would be the 75th coin? How do you know?"

By the end of this chapter, your student should feel confident with the learning targets and success criteria. Encourage your student to practice these skills in other contexts, such as page numbers, speed limit signs, and addresses.

Have a great time practicing factors, multiples, and patterns!



## Factors, Multiples, and Patterns (continued)

	Learning Target	Success Criteria
Chapter 5 Factors, Multiples, and Patterns	Understand factors, multiples, and patterns.	<ul> <li>I can find the factors of a number.</li> <li>I can explain the differences between factors and multiples.</li> </ul>
		<ul> <li>I can use divisibility rules to tell if a number is prime or composite.</li> <li>I can use a rule to create a number pattern.</li> </ul>
5.1 Understand Factors	Use models to find factor pairs.	<ul> <li>I can draw area models that show a product.</li> <li>I can find the factors of a number.</li> <li>I can find the factor pairs for a number.</li> </ul>
5.2 Factors and Divisibility	Use division to find factor pairs.	<ul> <li>I can divide to find factor pairs.</li> <li>I can use divisibility rules to find factor pairs.</li> </ul>
5.3 Relate Factors and Multiples	Understand the relationship between factors and multiples.	<ul> <li>I can tell whether a number is a multiple of another number.</li> <li>I can tell whether a number is a factor of</li> </ul>
		<ul> <li>another number.</li> <li>I can explain the relationship between factors and multiples.</li> </ul>
5.4 Identify Prime and Composite Numbers	Tell whether a given number is prime, composite, or neither.	<ul> <li>I can explain what prime and composite numbers are.</li> <li>I can identify whether a number is prime, composite, or neither.</li> </ul>
5.5 Number Patterns	Create and describe number patterns.	<ul> <li>I can create a number pattern given a number rule.</li> <li>I can describe features of a number pattern.</li> </ul>